## Appendix C

# Distribution of Supplies and Services in the Theater

Successful distribution must be both effective and efficient. Anticipation, integration, continuity, responsiveness, and improvisation facilitate effective and efficient distribution operations. Commanders and support personnel who integrate CSS concepts and operations with strategic, operational, and tactical plans must anticipate requirements, maintain visibility of the distribution pipeline, and be able to affect rapid and positive control within the distribution system. The theater distribution system allows units to request, receive, sort, maintain, distribute, retrograde, and control the flow of resources between the point of entry into the theater system and the destination within the theater. This appendix lays out the flow of discrete CSS resources through the theater hub: from reception in the theater hub to delivery at DS activities in the CZ.

Theater and corps hubs provide the foundation for the in-theater distribution pipeline. Hubs receive and stage all supplies, personnel, and units moving into the theater and prepare them for onward movement to their ultimate destination.

DMCs, found within theater/corps hubs and the division support area, manage the theater distribution system by accessing asset and ITV system tracking shipments as necessary, and establishing priorities to ensure that theater infrastructure is balanced with the resource flow requirements. This is accomplished through DMC staff supervision of distribution terminals and control centers and in close coordination with the functional elements.

## SUPPLY

C-1. Basic loads support units during the initial stages of an operation. APS may also provide support in early stages of an operation. Forward presence SSAs in DSUs at echelons above division are authorized to establish the combat ASL and other stockage requirements to sustain the operations. Forward presence general support units (GSUs) maintain a minimal level of combat essential supplies to satisfy high-priority requisitions and to account for interruptions in the distribution system. The number of items maintained is based on anticipated wartime usage rates. Beginning with the transition-to-war phase, the number of items maintained is adjusted to the wartime demand.

C-2. Adequate APS and staging base capabilities are maintained to meet anticipated force requirements in a theater until SLOC closure from CONUS.

APS materiel may be positioned in the COMMZ or other designated area to meet immediate needs at the onset of war. This dispersion of stocks also reduces vulnerability.

C-3. IAW the JFC and ASCC/ARFOR CSS priorities, the TSC MMC provides direction for receipt, storage, and issue of theater stocks. When the required stocks are not available or stock replenishment is required, requirements pass to the appropriate CONUS national inventory control point (NICP). Arriving shipments are routinely throughput from the port directly to direct support units (DSUs). With the exception of Class V, throughput routinely makes up 70 percent or more of the flow of supplies within the theater distribution system. Otherwise, shipments are directed to distribution terminals for reconfiguration or to an appropriate general support storage activity in the theater.

C-4. Whenever feasible, the distribution system will use strategic configured loads (SCLs). These loads configured in the sustainment base will be throughput whenever possible from the POD to SSAs.

## CLASS I

C-5. Class I items are initially pushed from CONUS or other sustaining locations to the theater. The mix of perishable and semi-perishable rations depends on the JFC's feeding policy, the arrival dates of units capable of handling Class I items, and the availability of refrigerated storage.

C-6. Class I supplies arriving in the theater are moved to a GS or a DS supply activity capable of handling them. GS supply activities can issue to other GS activities, but primarily issue to DS supply activities. DS supply activities issue Class I items to their customers, the consuming units. They stock Class I supplies based on unit strength reports submitted by the units they support. Currently, the supply point method is used to issue Class I items to consuming units. See FMs 10-1 and 10-23 for more details on Class I supply operations. Figure C-1 depicts the flow of Class I in a fully developed theater of operations.

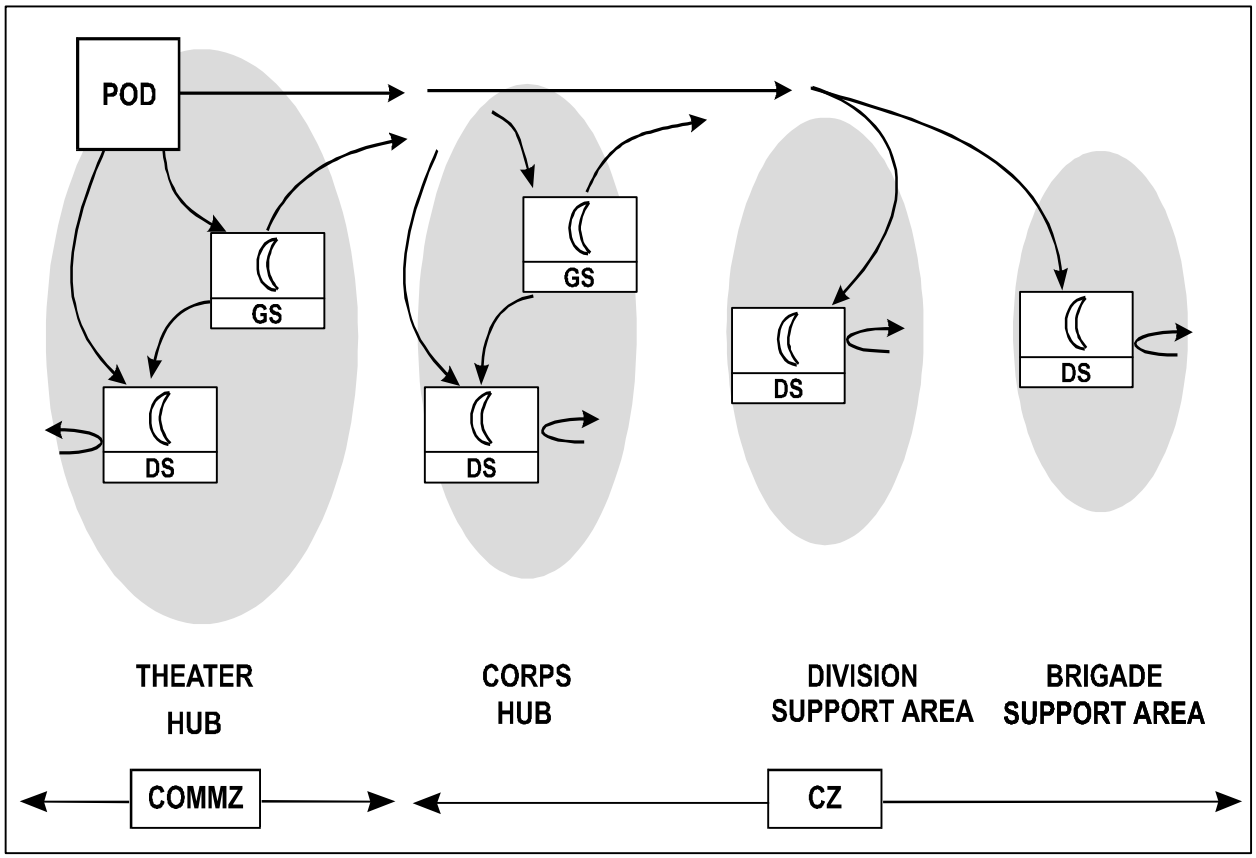



**Figure C-1. Distribution of Class I in the Theater**

## CLASSES II, III (PACKAGED) AND IV

C-7. Classes II, III (Packaged), and IV represent a broad range of general supplies that are less visible than other commodities. Nevertheless, they contribute significantly to the support of the mission. Class II consists of items such as clothing, individual equipment, tentage, organizational tool sets and kits, hand tools, maps, administrative/housekeeping supplies, and equipment. Class III (Packaged [P]) consists of packaged petroleum, oils and lubricants (POL) products that can be handled in basically the same manner as dry cargo. Class IV consists of fortification, barrier, and construction materials. Figure C-2 depicts the flow of Class II, III(P), and IV in a theater of operations.

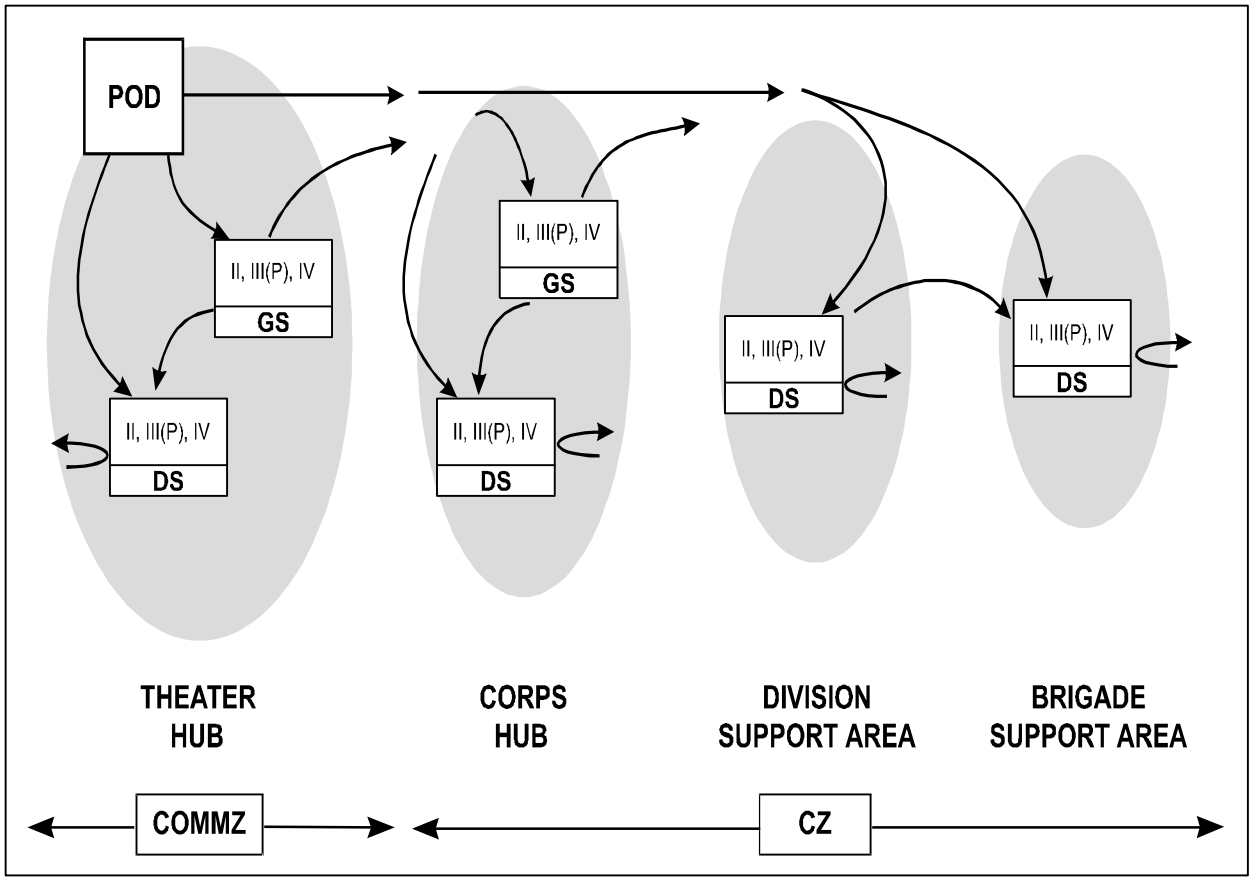



**Figure C-2. Distribution of General (Class II, III(P) and IV) Supplies in the Theater**

## CLASS III (BULK) SUPPLIES

C-8. The responsive supply of Class III (Bulk) is critical to battlefield success. The TSC MMC centrally manages, controls, and allocates it IAW the JFC's/ASCC's priorities. The operational-level commander, in coordination with the TSC, is responsible for providing bulk petroleum to US land forces. Support to multinational forces is based on established agreements.

C-9. Distribution planning is the basis for the design, construction, and operation of the theater petroleum distribution system. The senior petroleum unit commander is also responsible for quality surveillance and liaison with the TSC MMC as well as with the supported forces. Bulk fuels are distributed based on ASCC/ARFOR established priorities and TSC MMC directives. Stockage policy is covered in AR 710-2. Additional information on petroleum operations and organizations is in FMs 10-1 and 10-67. Figure C-3 depicts Class III (Bulk) supply flow in a theater of operations.

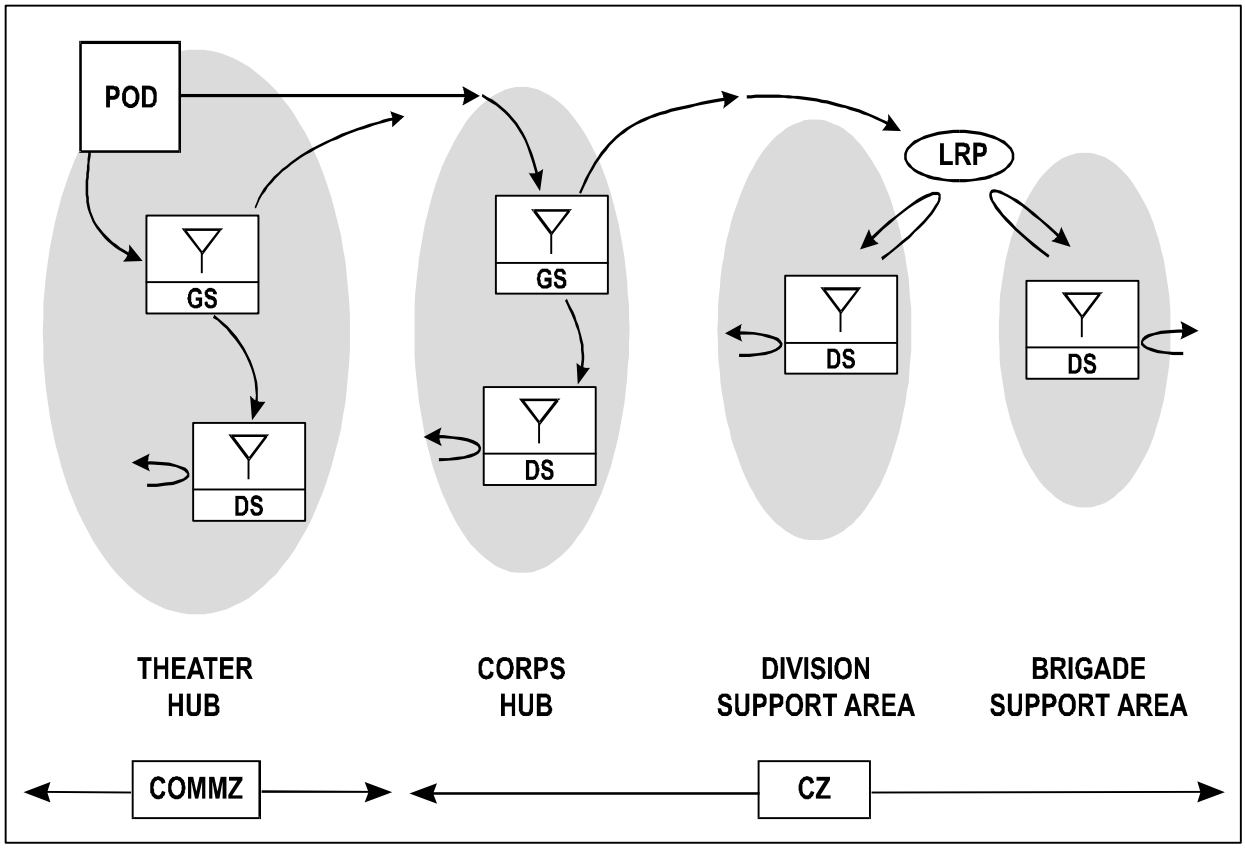



**Figure C-3. Distribution of Bulk Fuels (Class III) in the Theater**

**CLASS V**

C-10. The ASCC/ARFOR commander establishes priorities for theater Class V supplies, giving priority to the highest usage and most critical ammunition. The TSC MMC coordinates the shipment and delivery of stocks from CONUS IAW the CINC's support plan. Shipment is by either surface ships or aircraft. To immediately support rapid deployment forces, initial shipment is likely to be by air (ammunition accompanying troops and ammunition requirements prior to the forecasted arrival of APS ships). This is followed by APS ships and then surge shipping. The ASCC/ARFOR and JFC CSS planners must consider total force ammunition requirements in a contingency environment when planning for the movement of stocks and supported forces. The intent is to maximize throughput of ammunition whenever possible. Requirements are then filled with mission configured loads (MCLs) shipped from the corps storage area (CSA) or ASP as much as possible. FM 9-6 has details on Class V supply. Figure C-4 depicts ammunition flow in the theater. (Initiatives are underway to employ strategic configured loads (SCLs) for ammunition as with other classes of supply. These loads will be throughput whenever possible from the POD to the ATP. Several issues must still be resolved to take full advantage of SCLs of ammunition.)

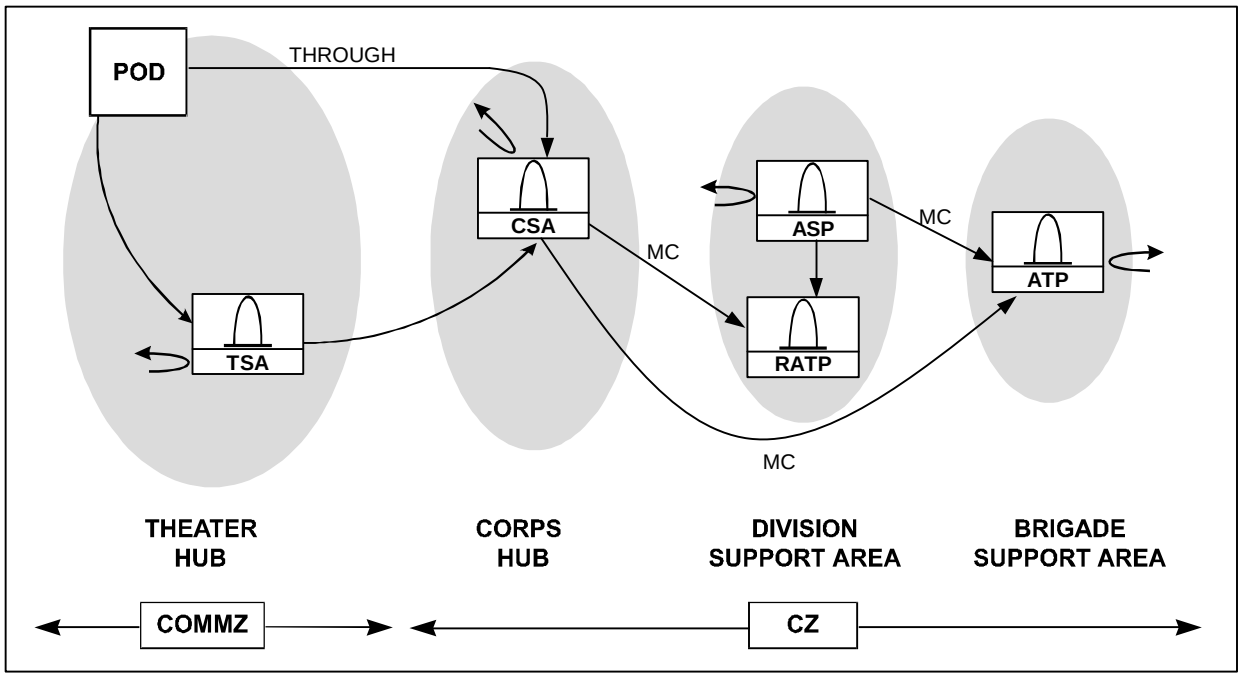



**Figure C-4. Distribution of Conventional Ammunition (Class V) in the Theater**

## CLASS VI

C-11. Army/Air Force Exchange System (AAFES) sales teams, operating fixed-area facilities and tactical field exchanges, may establish essential post exchange services at the operational and tactical levels of CSS. In the early stages of war, essential exchange stocks may be turned over to the theater supply system. The ASCC/ARFOR can request health and comfort packages and health and comfort packages-Type II, which are issued gratuitously with Class I supplies. Health and comfort packages contain health and sanitation items such as toothbrushes, toothpaste, razors, and personal demand items. The health and comfort packages-Type II contain additional health and comfort items for female soldiers. As the theater matures and conditions permit, exchange activities can be established or expanded and a wider variety of items can be sold. Class VI items forwarded to the theater are based on personnel strength figures. See FM 10-27 for more details.

## CLASS VII

C-12. Class VII supplies consist of major end items such as weapon systems (launchers, tanks, etc.), mobile machine shops, and vehicles. Major end items are a final combination of end products that are ready to use. They represent a low percentage of total line items but a high percentage of the total dollar value of the Army inventory. Because of the high dollar cost and their overall importance to combat readiness, major end items are usually controlled

through command channels; otherwise, the TSC MMC controls them at theater level. The requisitioning, distribution, maintenance, and disposal of these items are intensely managed at each support level to ensure visibility and operational readiness. Major end items are controlled and distributed IAW carefully developed theater distribution plans and directions. Figure C-5 depicts Class VII materiel flow.

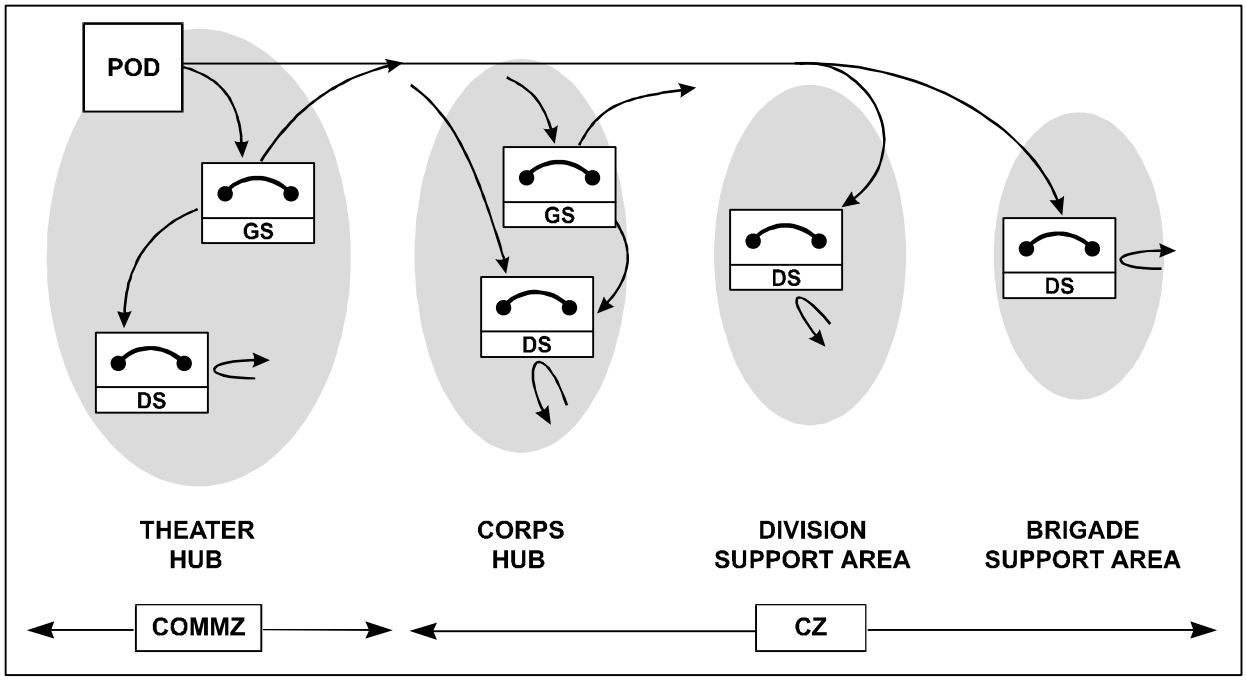



**Figure C-5. Distribution of Major End Items (Class VII) in the Theater**

## CLASS VIII (COMBAT HEALTH LOGISTICS)

C-13. Combat health logistics must be anticipatory and projected when and where needed. It must be tailored to continuously support missions through all stages of operations and across the operational continuum. The Class VIII supply system must reduce its reliance on strategic air and sea lift, utilize throughput distribution to the maximum extent possible, eliminate double handling, and recognize and plan for the distribution mission. Theater Class VIII supply management is accomplished through a unit distribution system that pushes preconfigured supplies and services as far forward as needed. Blood and resuscitative fluids are dispersed throughout the medical support system using predetermined distribution guidelines. The MLMC links the wholesale system (CONUS) with the theater. The Army combat health logistics system serves as the theater's Single Integrated Medical Logistics Manager (SIMLM). See FM 8-10-9 and FM 8-55 for comprehensive discussions on this subject.

C-14. In a mature theater the medical logistics (MEDLOG) support company is responsible for resupplying Army medical units in the COMMZ and

resupplying MEDLOG support companies in the corps. The corps MEDLOG support companies resupply divisional and nondivisional medical units in the CZ. The MEDLOG support company along with the MLMC performs the single integrated medical CSS mission in support of joint or multinational operations.

C-15. Initially, resupply to the theater is provided by preplanned, time-phased shipments of medical resupply sets from the CONUS strategic CSS system. When possible, medical supplies are shipped directly to the corps MEDLOG support company from the national strategic CSS base. This happens when required supply echelons of care are determined and normal replenishment, based on theater demand, replaces the preplanned resupply system.

**CLASS IX**

C-16. The TSC MMC manages Class IX supplies for the theater. The degree of management is generally proportional to the contribution repair parts make to the operational readiness of the end items they are supporting. Items such as major assemblies, that directly affect the ability of end items to operate in combat, receive particular attention. Another factor affecting management is dollar value of supplies. Combat-essential and high-dollar-value items are intensely managed at all levels. Low-cost, noncombat-essential items may be managed within the established parameters of the automated systems at the various echelons of supply, thereby allowing the manager to concentrate on fewer items.

C-17. The operational level of Class IX supply focuses on providing a GS level of supply that provides a safety level for all repair parts and a level of stockage for the items that will not be sent to the theater via ALOC. Easing these supply requirements are the serviceable assets that GS maintenance repair of line replaceable units generates. These theater-generated assets can offset the requirement to support from the strategic level of supply.

C-18. ALOC cargo arrives daily at predetermined in-theater aerial ports. Most Class IX ALOC-eligible items are delivered directly to the requesting SSA. The remaining Class IX ALOC items are delivered to a GS repair parts supply company in the COMMZ or CZ. Air eligible Class IX support begins when the ALOC is established, but non-ALOC support must await SLOC establishment. FM 10-1 and FM 10-27 contain additional information on Class IX supply. Figure C-6 depicts Class IX materiel flow.

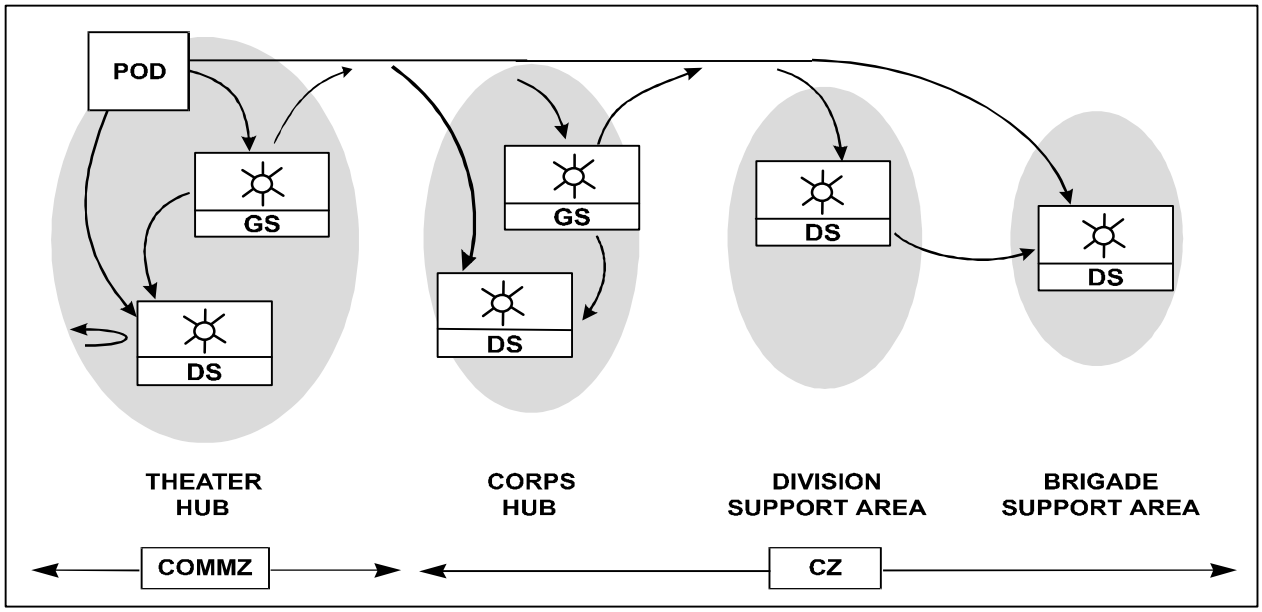



**Figure C-6. Distribution of Repair Parts (Class IX) in the Theater**

## WATER

C-19. MMCs monitor water priorities and allocation procedures and provide the commander with supply information. In many regions of the world, surface water is readily available and DS purification, storage, and distribution capabilities are sufficient. However, when well drilling is necessary, the senior engineer command in the theater assists CSS personnel by locating and drilling in the most appropriate places. Army of Excellence Divisions, separate brigades and armored cavalry regiments (ACRs) have organic DS purification, storage, and distribution capabilities. Force XXI divisions and all nondivisional units receive DS water support from water purification, storage, and distribution elements of echelon above division (EAD) quartermaster supply and water support force structure. These DS units provide support on a unit or area basis.

C-20. In an arid environment, available water sources are limited and widely dispersed. Surface fresh water is almost nonexistent, and the availability of subsurface water varies within geographic regions. This lack of water sources mandates extensive purification, storage, and distribution. GS water units provide these capabilities. Once a suitable water source is found, it must be treated through a process of reverse osmosis before it becomes a routine item of supply. For that reason, water purification is identified as a field service.

C-21. EAD water elements will be able to package water. The packaging will involve an expendable, lightweight material. There will be a broad spectrum

of package sizes, providing added flexibility to consumer units. The packages

will be used for water distribution, logistic packages, and caches. FMs 10-1 and 10-52 contain additional information on water support operations. Water is required for decontaminating personnel and equipment. Water for NBC decontamination does not have to be potable. The amount of water needed depends on the frequency, intensity, and location of enemy NBC attacks.

## MAINTENANCE

C-22. Maintenance is critical to sustaining the Army. Without on-time maintenance, the combat arms and supporting services will not have the firepower, communications, and mobility to win in battle. It involves recovering, repairing, replacing, and returning equipment or components to the end user or the supply system. Such activities require materiel and distribution managers to integrate the various CSS systems. The personnel system ensures maintenance activities have soldiers and civilians with the required skills. The supply system supports maintenance activities with repair parts, tools, and equipment needed to perform maintenance. Transportation assets must be effectively prioritized to evacuate equipment and move required repair parts to appropriate maintenance sites. In addition, those same assets are required to return repaired equipment and components back to the using unit and/or appropriate SSA. Synchronization of all these activities within the distribution system results in a greater flexibility to satisfy the commander's priorities.

### GROUND

C-23. A major change to the Army maintenance system is how we execute the four levels of maintenance. These are called flexible levels of maintenance. Rather than using the levels of maintenance in a lockstep fashion with one level supporting the next, only selected levels may be used. As an example, a particular component may be replaced at unit level, but repaired at depot, skipping field and sustainment maintenance units altogether.

C-24. Field maintenance provides repair by replacement and one-stop maintenance to the user. Division field maintenance units support the division and its maneuver elements. They also provide maintenance support to echelon above division units in their area. Nondivisional field maintenance units generally provide area support in the corps and EAC. Some nondivisional field maintenance units also provide backup/reinforcing support to the division. Field maintenance units project support though deploying maintenance support teams. LSEs can also establish forward repair activities and/or special repair activities to form a seamless maintenance structure. Forward repair activities repair customer equipment by replacing components. Forward repair activities can either

repair unserviceable components or use the distribution system to evacuate those components to another maintenance activity for repair.

C-25. MMCs at all levels identify critical end items and components and recommend maintenance priorities and timelines to the commander. Maintenance units may provide limited backup recovery support and coordinate the evacuation of customer equipment that exceeds established maintenance repair timelines, capabilities, or capacity. Maintenance units normally coordinate evacuation of equipment for repair to another direct support unit for any of the above listed reasons. The distribution system is used to facilitate the movement of the equipment to a maintenance activity that can accomplish the required repairs. See Figure C-7.

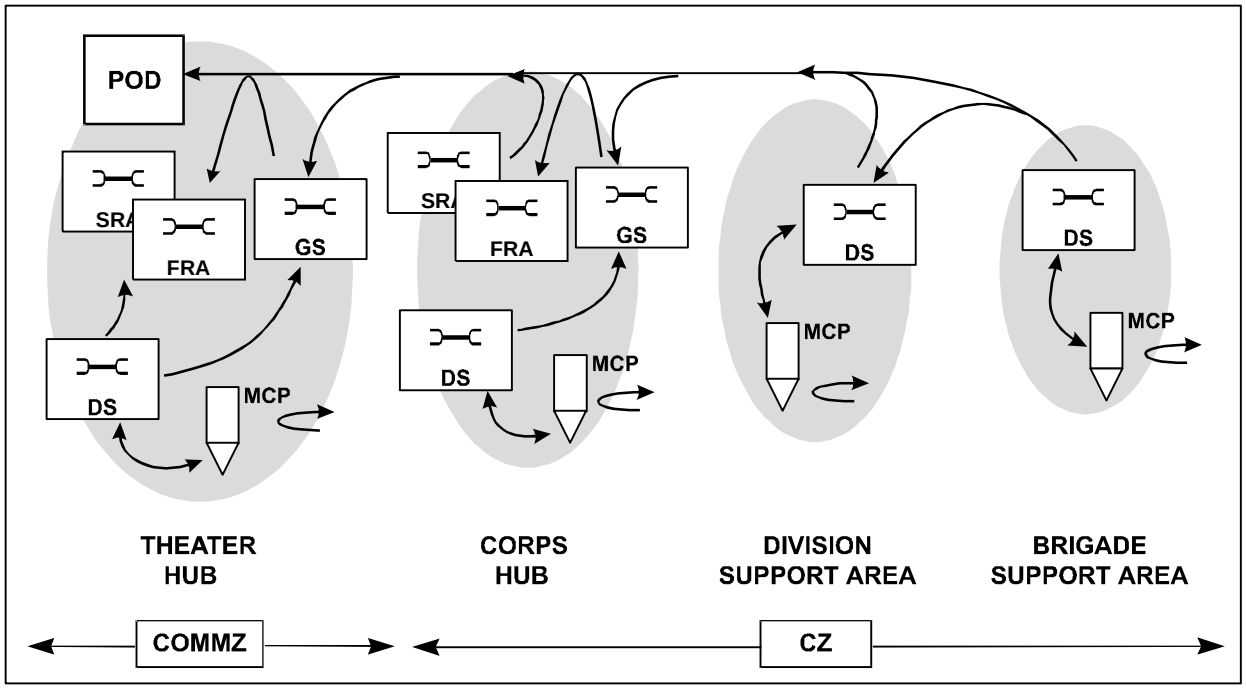



**Figure C-7. Concept of Operations for Maintenance Evacuation in the Theater**

## AVIATION

C-26. Aviation units are responsible for performing aviation unit maintenance (AVUM) on assigned aircraft, including organizational level aircraft system and subsystem maintenance and servicing, combat emergency temporary battle damage assessment and repair (BDAR), and aircraft recovery and evacuation. Divisional and nondivisional aviation intermediate maintenance (AVIM) units provide a one-step or intermediate level of maintenance between the operating units (AVUM) and depot. Divisional AVIM companies are part of the DISCOM. In a heavy division, the DISCOM includes a division aviation support battalion (DASB). The DASB contains a headquarters and supply company, a ground maintenance company, and an aviation maintenance company (AVIM). It provides direct

support to the divisional aviation brigade. Nondivisional AVIM support for corps and EAC is provided by nondivisional aviation maintenance battalions (AMBs). These units are employed on an area basis and assigned to the appropriate (tactical or operational) level CSS organization. An aviation assistance team or an aviation classification and repair activity depot (AVCRAD) may provide maintenance support above AVIM in theater. The AVCRAD, a CONUS-based reserve component roundout unit, provides selected depot-level support and backup AVIM within the theater. Should operational-level activities require Army aviation support, an operational-level AVIM organization is assigned; however, the operational mission may be inconsistent with the mission for which the AVIM was specifically designed. When appropriate, alternatives may include assigning the mission to the LSE AVCRAD, contracting with commercial maintenance facilities, or making cross-service arrangements. Refer to FM 1-500 for additional aviation maintenance information.

**MARINE**

C-27. A DS maintenance capability for all watercraft is integrated into organic unit maintenance. Floating craft maintenance elements of the transportation group provide GS maintenance to Army watercraft. The owning units normally recover watercraft. Evacuation is by specialized watercraft, such as the large tug. Depot- level maintenance may be obtained through the LSE.

**RAIL**

C-28. The transportation railway operating company has a railway equipment maintenance platoon that will inspect, service, and repair diesel-electric locomotives and rolling stock. The HN, under a memorandum of understanding (MOU) or memorandum of agreement (MOA), or a commercial contractor provides rail assets, recovery, evacuation, and major repairs.

**AIRDROP EQUIPMENT**

C-29. Airdrop equipment repair and supply companies, located in the airborne corps and COMMZ, perform airdrop equipment maintenance. In the airborne corps, this unit provides GS supply support and DS/GS maintenance support of airdrop equipment in support of the multiple airdrop support units organic to the airborne corps. Units include the airborne division airdrop equipment support (AES) company, the airborne corps AES company, and the light airdrop supply company. At the operational level, this company provides similar support to the operational- level heavy airdrop supply company and to the light airdrop supply company in each corps (other than the airborne). This company responds to the appropriate level MMC for both supply and maintenance. Additional information on airdrop equipment maintenance is in FMs 10-1 and 10-500-1.

### MILITARY INTELLIGENCE/ELECTRONIC WARFARE

C-30. The military intelligence (MI) commander is responsible for both unit and DS maintenance of intelligence electronic warfare (IEW) systems/equipment. GS and depot-level maintenance organizations perform maintenance and repair of these systems/equipment that exceed the capability of the MI commander's organic assets. GS maintenance is routinely accomplished off-site at semifixed and fixed facilities. The LSE provides the flexibility to project depot-level maintenance capability.

### AUTOMATION

C-31. The automation network of the theater distribution system is critical to the timely and accurate flow of relevant information. The CSS automation management offices located in the support organization at each echelon provide support for the software systems operating on the theater's automation hardware. They coordinate the installation and synchronization of the STAMIS and assist units with CSS automation planning. Military or contractor personnel perform on-site DS/GS maintenance on computer hardware or evacuate it to a DS maintenance facility. To effectively support sustainment maintenance of automation systems and repairable components above DS, a centralized commodity-oriented maintenance activity is established. This activity can deploy as part of an LSE. It deploys with sustainment stocks and maintains a database of all systems under its jurisdiction. It provides piece-part repair and is capable of repairing and returning to stock all levels of automated systems and peripheral devices.

## FIELD SERVICES

C-32. The proper distribution of field services in the theater is critical to the maintenance of health, sanitation, welfare, and morale of the force. Field services consist of field feeding; mortuary affairs; aerial delivery; laundry, shower, and clothing and light textile repair; and water purification. The decision as to which field services are more critical is left to the JFC/ASCC in the theater.

### FIELD FEEDING

C-33. Distribution of Class I is a direct result of the Army field feeding policy. The Army field feeding standard is that soldiers are fed three quality meals daily, to include one A/B meal per day, depending on METT-TC. Deploying units initially consume meals, ready- to- eat (MREs). As quickly as practical, the standard changes to allow soldiers to consume a variety of group feeding rations.

### MORTUARY AFFAIRS

C-34. The mortuary affairs program consists of three distinct programs: the current death, graves registration, and concurrent return programs. Regardless of the program in effect, remains are evacuated in the distribution system through a series of collection points located throughout

the theater (see Figure C-8). If no temporary cemeteries or mortuaries are located in the theater, all remains are processed through the theater mortuary evacuation point for evacuation to a CONUS port-of-entry mortuary. JP 4-06 and FM 10-1 contain additional information on mortuary affairs.

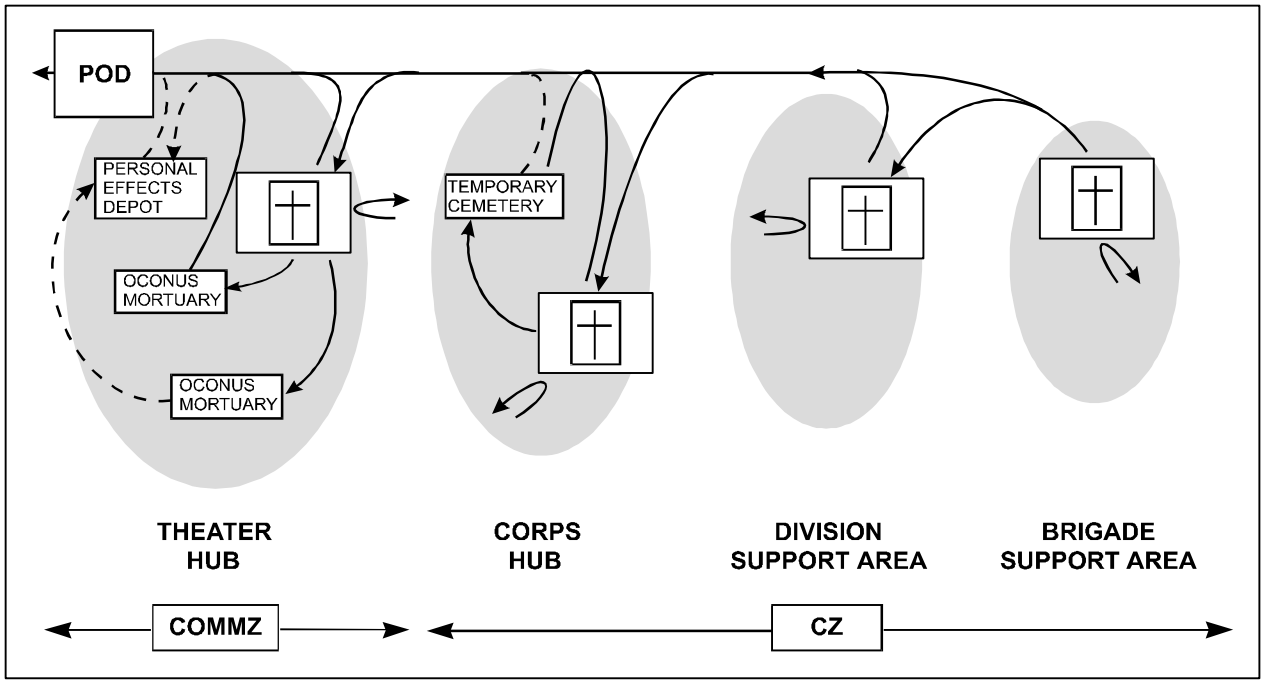



**Figure C-8. Concept of Operations for Evacuation of Remains in the Theater**

## AERIAL DELIVERY

C-35. Aerial delivery is a critical aspect of the resource network within the distribution system. Airdrop equipment support companies provide support to an airborne insertion operation. This entails packing parachutes (personnel/cargo), rigging loads for airdrop, and performing organizational maintenance on the unit's airdrop equipment. Airdrop equipment companies provide airdrop resupply support to the force, primarily to combat units engaged in the vicinity of the forward line of troops. Airdrop responsibilities at the operational level are to provide backup airdrop resupply support and airdrop equipment supply and maintenance support to tactical level airdrop units.

## LAUNDRY, SHOWER, AND CLOTHING/LIGHT TEXTILE REPAIR

C-36. The standard is to provide at a minimum a weekly shower to each soldier and, also on a weekly basis, to launder, make minor repairs, and return a soldier's individual clothing within a 24-hour period. The

weekly shower is even more important if individuals wear NBC defense clothing for a length of time. This field service is provided only in the DS mode. Within the division and corps area, this support is provided almost exclusively by field service units during war; at the operational level, by a mixture of field service units, HNS, and civilian contract. If a laundry and renovation GS capability is required, it must be provided from HNS or civilian contract. More information on laundry and shower support is in FM 42-414.

## WATER PURIFICATION

C-37. Water purification capabilities are found at both the tactical and operational levels. Purified water enters the GS water distribution system from onshore or offshore purification points. GS water purification teams and detachments operate these purification points using reverse osmosis water purification units. Purified water is stored in collapsible fabric tanks at a base terminal storage facility. It is distributed to other terminals at the operational level and to the tactical level by the Tactical Water Distribution System, semitrailer-mounted fabric tanks, or hard-wall tankers. The water assets at the operational level come under the C2 of the petroleum and water group; at the tactical level they come under the COSCOM and DISCOM. When the GS water system is implemented, both corps and division require augmentation with additional storage and distribution capability. Additional information on water purification is discussed under water supply earlier in this section and in FMs 10-1, 10-52, and 10-52-1.

## FORCE PROVIDER

C-38. Force Provider is an air transportable 550-man modular collective support system that supports a myriad of mission profiles, including soldier rest and refit, convoy support, theater reception, and staging base operations. Airframe requirements by type aircraft for each module are: C-130=54; C-141=24; C-17=12; C-5=9. These requirements are based on 109 triple container, shipping, and storage (TRICON) and 5 international standards organization (ISO) containers, 27 generators, 4 water trailers, and 1 wastewater vacuum tank/trailer. (This does not include unit equipment. It is based on the Force Provider module itself.) Force Provider can also be used to support humanitarian aid operations, disaster relief missions, and peacekeeping operations. FM 42-414 has a detailed discussion on Force Provider operations in the theater.

# TRANSPORTATION

C-39. Transportation is a fundamental element of a distribution-based CSS system. It forms the centerpiece for reception and onward movement within the theater distribution system. Theater transportation consists of movement control, modal operations, and terminal operations that work together to provide transportation support to the theater, to carry out linkages to strategic transportation, to perform operational tasks, and to support reception and onward movement. Included may be support to other Services or allied nations.

## MOVEMENT CONTROL

C-40. Movement control is the planning, routing, allocation, validation, deconfliction of priorities, coordination, and ITV of personnel, units, equipment, and supplies moving over LOCs, and the commitment of apportioned transportation assets according to command planning directives. It is a continuum that involves synchronizing and integrating CSS, movement information, and programs that span the strategic, operational, and tactical levels of war. Movement control is guided by a system that balances requirements against capabilities and assigns resources based on the combat commander's priorities.

C-41. Movement control at the operational level links strategic and tactical levels of war movement control organizations. At the theater level, centralized movement control is imperative for accomplishing the phases of strategic deployment, reception, staging, and onward movement. It is also vital for sustaining forces in the combat zone, along with supporting joint service requirements assigned by the JFC to the ASCC/ARFOR.

C-42. Movement control at the tactical level of war is the responsibility of the tactical commander. Movements within the corps must be synchronized and coordinated to ensure a continuous flow that maximizes the use of available transportation assets, infrastructure, and LOCs. Division transportation links the other CSS functions into a system dedicated to supporting the division forces and their weapons systems. Movements planning and execution in the division is a staff responsibility rather than being vested in operational units found at corps and EAC. FM 55-10 contains additional information on transportation management and movements control in the theater of operations.

## THEATER AIR TRANSPORT

C-43. Allocated Air Force support, HN, and Army aviation units provide air transportation within a theater. Army air transport is used to extend the ALOC. Airlift provides support for aerial pre-planned and immediate resupply, movement of critical high-priority Class IX, retrograde of reparables, pre-positioning of fuel and ammunition, and movement of low-density/high-cost munitions when time, distance, or road conditions prohibit ground transportation. Army helicopters complement other modes of

transportation when speed is essential. Army air transport can be designed to provide the connecting link between theater air and sea terminals and receiving supply activities, receiving units, or cargo transfer points. The corps movement control personnel manage Army air transport originating in the corps. It obtains its airlift from the corps aviation brigade.

**MOTOR TRANSPORT**

C-44. Army motor transportation is a key element of the integrated transportation system. The most versatile mode of transport, it is normally the primary mode of support to Army forces. It provides the link between the receiving units, major aerial and sea ports, supply centers, and rail and IWW terminals. Motor transport units not only provide support to the COMMZ but also linehaul service as far forward as the brigade support area (BSA).

**RAIL TRANSPORT**

C-45. Military rail unit capabilities are limited to the Army's one deployable transportation railway battalion which is capable of operating 160 to 200 kilometers of railway. Therefore, US forces rely on HN rail transportation to the maximum extent possible for port clearance and inland movement of high-tonnage and high-density equipment and supplies. The railway battalion is normally assigned to the senior transportation organization.

**WATER TRANSPORT**

C-46. Army water transport units and teams provide water transport, port, and harbor support in harbor areas and IWWs along theater coastlines. Water transport units support movement of military cargo and personnel through and between Army water terminals, as far forward as IWWs and the tactical situation allow. Water terminal operations are conducted at established ports, at beach sites, or at unimproved facilities. They are an integral part of IWW and logistics-over-the-shore operations. Army water transport units normally operate as part of a terminal battalion and are attached to and commanded by an element of the transportation organization.

**OCEAN WATER TERMINAL OPERATIONS**

C-47. Ocean water terminals are classified as fixed facilities, improved facilities, unimproved facilities, or bare-beach port facilities. Normally, general cargo terminal operations apply to all ocean terminals. Container, roll-on/roll-off, and combination terminals usually refer to fixed-port facilities. Logistics-over-the-shore (LOTS) operations no longer refer to only bare-beach operations; the expanded definition applies to an operation where ocean-going cargo vessels are discharged to lighterage for subsequent discharge to bare-beach (improved or unimproved) facilities.

**INLAND TERMINAL OPERATIONS**

C-48. Army transportation cargo transfer units establish inland terminals at both ends of and at interchange points along theater air, rail, and motor transport systems to provide for transshipment of cargo and personnel carried by these modes. Normally, operation and control of the entire inland terminal facility are the responsibility of a mode battalion or transportation group having primary transport responsibility in the region the terminal is located.

## PERSONNEL SUPPORT

C-49. Personnel detachments, personnel services battalions, personnel groups, theater PERSCOMs, postal companies, replacement battalions and companies, CONUS replacement centers, and reception battalions in close coordination with the personnel staffs of each level of command (S1, G1, and DCSPER staffs) execute the personnel support mission in the theater as part of the integrated distribution system.

C-50. Success in combat is directly affected by the success of personnel support elements within CONUS and the theater of operations. Manning ensures that military personnel of the right type and in the right numbers are on the battlefield. Whether committed to a forward-presence or power projection mission, personnel support must be tailored and distributed to satisfy the commander's tactical and operational requirements, either for Army alone or in concert with a joint or multinational force.

C-51. Specific functions related to distribution include the following:

- Personnel detachments collect, validate, process, and manage combat essential information; manage critical personnel systems; and provide essential services to commanders, soldiers, deployed civilians, and joint or allied personnel.
- Postal companies receive, process, and deliver mail and provide other postal services.
- Replacement companies may be part of a replacement battalion, personnel group, or personnel services battalion. They receive, support, and process replacements (see Figure C-9).

**Figure C-9. Concept of Operation for Replacement Flow in the Theater**

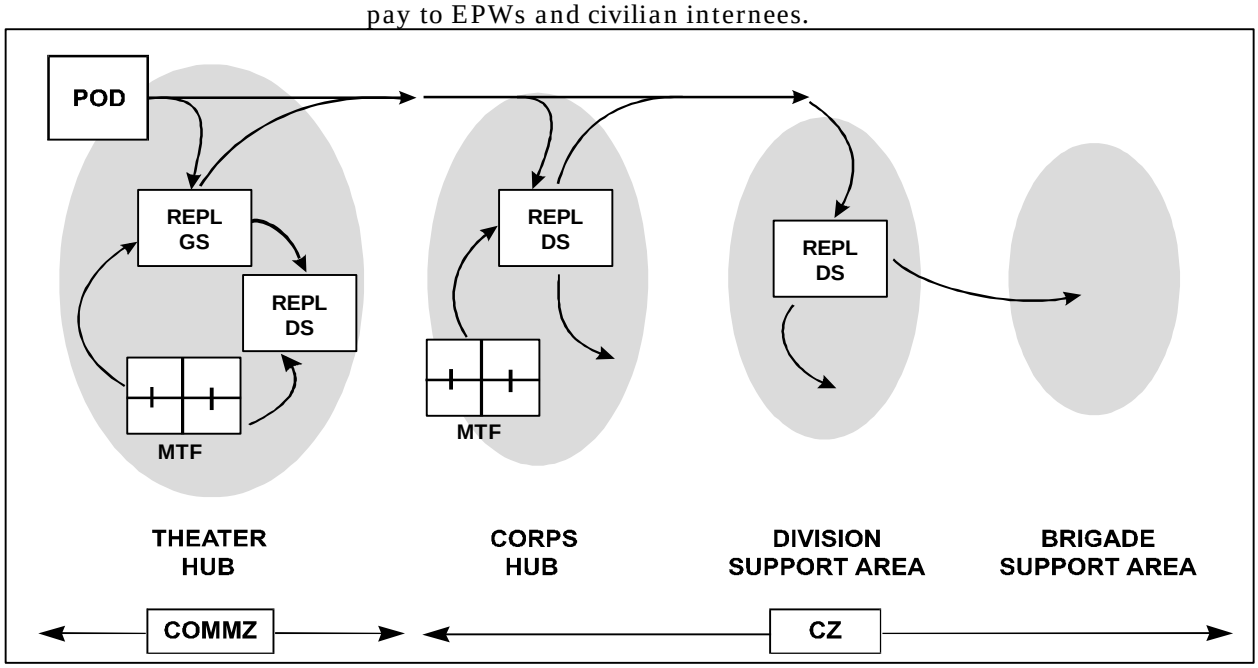
## FINANCE SERVICES

C-52. The proper distribution of finance support within the theater distribution system is critical to the efficient and effective leveraging of regional infrastructure. The finance mission is to sustain the Army during joint and multinational operations by providing timely commercial vendor and contractor payments, various pay and disbursing services, and limited accounting. Military pay, travel, and disbursing are missions that offer morale support and, as such, provide an additional combat multiplier to the warfighting commander.

C-53. As directed, the senior finance commander in the theater is responsible for providing finance support to all joint and multinational commands and policy and technical guidance to finance units.

C-54. Finance units provide the full range of finance and accounting services to all military personnel and units in the theater as described in FM 14-100. They also –

- Formulate financial policy for the commander and establish finance procedures.
- Provide finance support for the theater by preparing and paying commercial vouchers, travel vouchers, and foreign national payrolls; cashing negotiable instruments; funding tactical exchange facilities and other nonappropriated fund instrumentalities; and accounting for pay to EPWs and civilian internees.



- Provide currencies for local procurement payments, foreign national payrolls, paying agents, combat payments, day laborer payments, intelligence and counterintelligence operations, and claims.

## LEGAL SERVICES

C-55. As described in FM 27-100, legal service support to the command, the organization, and the soldier is accomplished within a theater of operations through seven functional areas: administrative law, contract law, criminal law, international law, operational law, claims, and legal assistance. Staff judge advocate (SJA) sections at every major echelon of command, from division to theater, provide legal service support. Theater legal service support to the theater distribution system includes interpretation and application of appropriate host nation and international laws for the acquisition of infrastructure and sustainment.

## COMBAT HEALTH SUPPORT

C-56. The theater CHS system is a single integrated system from the forward line of own troops to CONUS. Since forward site medical treatment facilities (MTFs) are light and mobile (battalion aid stations and clearing stations), a system of echelons of care (see Figure C-10) is used to provide continuity as the patient is evacuated from forward areas to MTFs staffed and equipped to handle his medical needs. These facilities are normally in the corps and COMMZ.

C-57. Overall responsibility for Army CHS in a theater rests with the ASCC. Normally, a MEDCOM headquarters or a module of the MEDCOM control the theater CHS structure. However, a medical brigade may be the C2 unit of the medical support elements based on the size of the operational-level medical force in a force. It provides the flexibility to shift assets to support additional theater buildup, reallocate medical assets to accommodate patient workload, and reconstitute lower echelon medical units. If the operation expands into a multicorps force, the medical support headquarters be established on a regional basis. FM 8-10 discusses health services support as a theater of operations. The goal of the medical system is to return fully functional soldiers to duty.

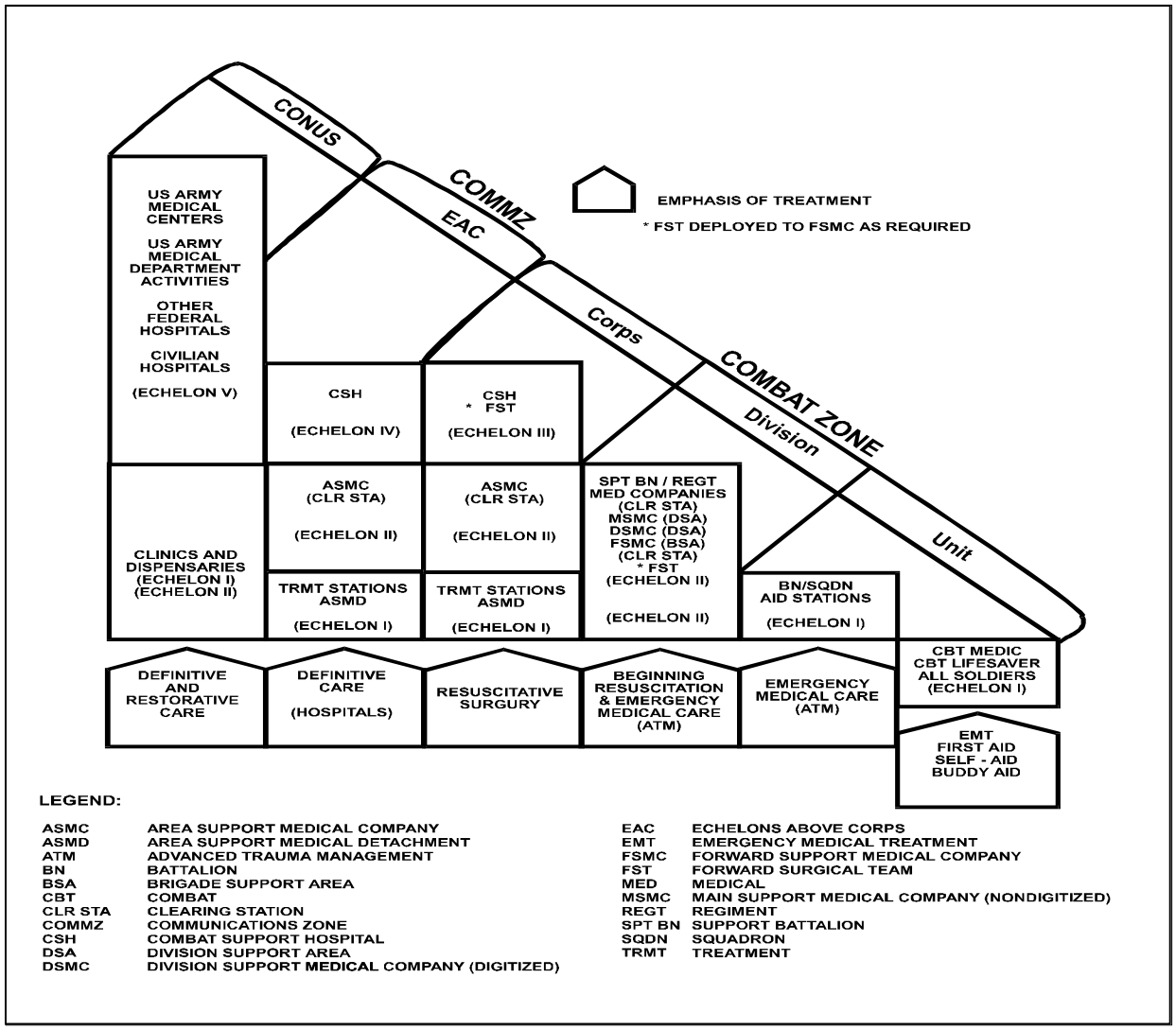



**Figure C-10. Echelons of Care**

## MEDICAL EVACUATION AND REGULATION

C-58. Medical evacuation from the battlefield is a critical element of the overall CHS system. It must be immediately available and capable of moving seriously wounded, injured, or ill personnel from forward locations on the battlefield. Both air and ground evacuation must be totally integrated into the CHS mission in order to treat and evacuate casualties. Air evacuation is the primary and preferred mode of evacuation. Regardless of the mode of evacuation, all evacuation vehicles are capable of providing enhanced en route medical care and monitoring capabilities. As a part of this process, patients are regulated to the most appropriate echelon of care. Patient regulating is accomplished through coordination with corps medical C2 organizations and the forward areas of the battlefield. The movement of patients through the theater medical evacuation system is managed through

the medical regulation system. Together, air and ground evacuation ensure continuity of care and the continuous flow of casualties through the CHS system. Coordinated, integrated, and enhanced evacuation minimizes the number and relocation requirements of theater hospitals. In the COMMZ, the medical evacuation (MEDEVAC) battalion performs ground, air, and rail (if available) MEDEVAC of Army personnel. This mission is accomplished with organic ground and air ambulance companies and attached rail ambulance detachments (see Figure C-11).

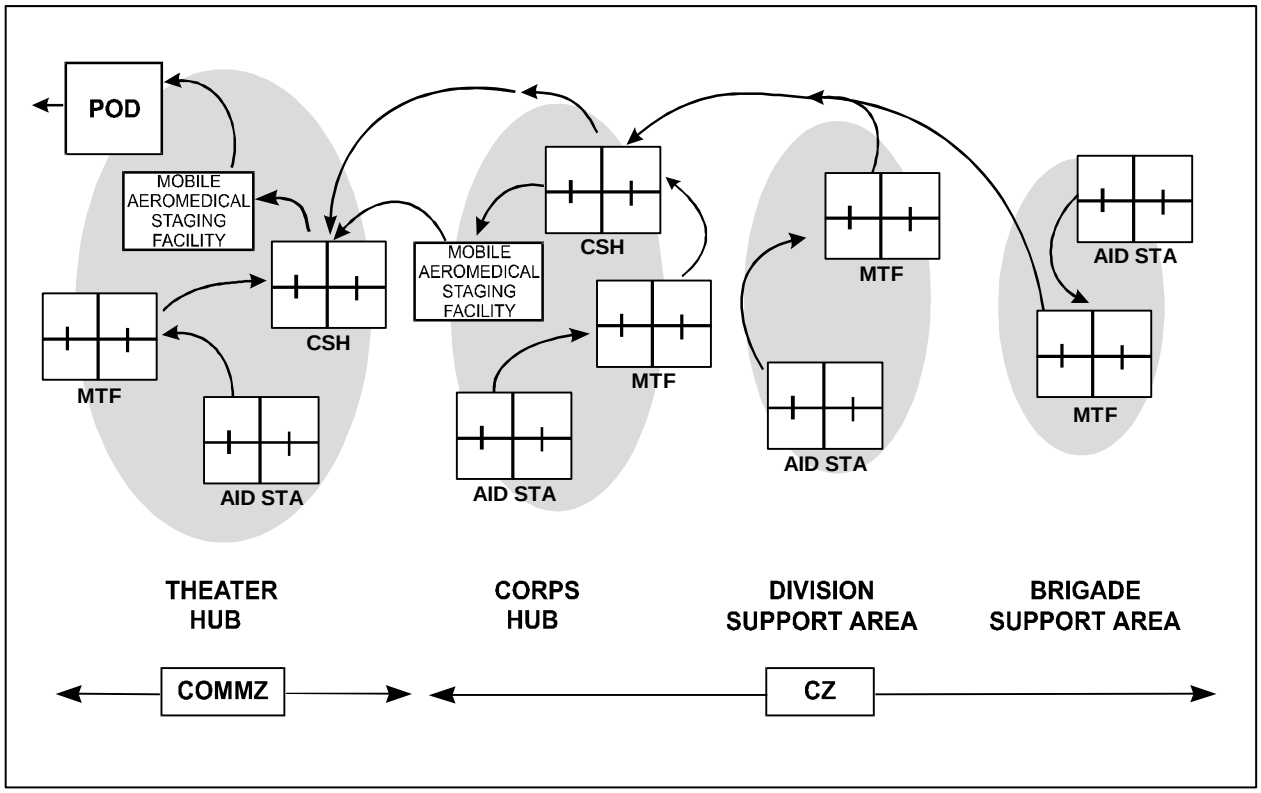



**Figure C-11. Medical Evacuation in the Theater**

## COMBAT HEALTH LOGISTICS

C-59. Combat health logistics must be anticipatory and projected when and where needed. It must be tailored to continuously support the mission through all stages and types of operations. Commanders and staffs must carefully plan and manage the distribution of Class VIII supplies. Their goal is to reduce reliance on strategic air and sea lift, use throughout distribution as much as possible, and eliminate double handling. Theater Class VIII supply management is accomplished through a unit distribution system that pushes preconfigured supplies and services as far forward as needed. Blood and resuscitative fluids are dispersed throughout the medical support system using predetermined distribution guidelines. The MLMC links the wholesale system in CONUS with the theater. The Army combat health logistics system manager serves as the theater's single integrated medical

logistics manager. The supply discussion earlier in this appendix gives more information.

## ENGINEER SUPPORT

C-60. Engineer forces at the operational level are responsible for constructing, maintaining, and rehabilitating the theater distribution system. Their responsibilities include support to other Services, agencies, and allied military forces in joint and multinational theaters of operations. The ability of CSS units to perform sustainment operations as well as move and shelter combat/combat support forces depends on adequate, responsive engineer support. The numbers and types of operational-level engineer support units depend on the size of the support base required, HN infrastructure, the mission, the availability of existing engineer support in the theater of operation, and perceived threat in the rear area.

### CONSTRUCTION SUPPORT

C-61. In consonance with JCS guidance, the JFC establishes broad standards and policies for theater construction that guide engineer operations, whether they are performed by Air Force, Army, or Navy units. They are based on coordinated planning by construction representatives from all Service components. Theater construction policies establish standards, priorities, and the theater construction management structure.

C-62. The JFC may retain control at his level or delegate construction management to a regional contingency engineering manager (RCEM). When the Army is the RCEM, the senior engineer commander performs this function. The RCEM manages all construction, repair, and facility modification in the COMMZ. This structure provides centralized control with decentralized execution. The RCEM also manages all troop, contract, and HN construction repair operations in the COMMZ. Such a structure ensures that theater construction assets are employed according to theater priorities.

### REAL ESTATE PLANNING AND ACQUISITION

C-63. The US Army Corps of Engineers (USACE) theater element provides technical real estate guidance and advice to the theater commander. In addition to recommending real estate policies and operational procedures, it acquires, manages, disposes of, administers payment for rent and damages, handles claims, and prepares records and reports for real estate used within the theater. The theater element also exercises staff supervision over real estate operations of subordinate Army commands and provides real estate support to other US Services.

### REAL PROPERTY MAINTENANCE

C-64. The JFC has overall responsibility for real property maintenance activities (RPMA). He normally delegates authority to the ASCC/ARFOR, who may further delegate to the TSC. The TSC and installation commander

normally provide the needed RPMA support. Principal RPMA in a theater of operations include operation, repair, and maintenance of facilities and utilities, fire prevention and protection, and refuse collection and disposal. RPMA requirements that exceed the CSS organization's capabilities are forwarded to the supporting USACE element for execution according to theater priorities. The TSC provides technical RPMA guidance to subordinate CSS organizations. The subordinate CSS organizations provide RPMA support to all Army facilities in the theater, including leased facilities unless HNS is available for leased facilities. FM 54-40 discusses the ASG role.